

10172200 RED BUTTE CREEK AT FORT DOUGLAS, NEAR SALT LAKE CITY, UT
(Hydrologic bench mark station)

LOCATION.--Lat 40°46'48", long 111°48'19", in NE¹/4SE¹/4NW¹/4 sec. 35, T. 1 N., R. 1 E., Salt Lake County, Hydrologic Unit 16020204, on right bank 0.4 mi upstream from dam forming Red Butte Reservoir, and 1.7 mi northeast of Fort Douglas.

DRAINAGE AREA.--7.25 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year. Figures of monthly discharge for January 1942 to September 1963, collected by Corps of Engineers, U.S. Army, available in files of Salt Lake City District Office, Geological Survey.

GAGE.--Water-stage recorder. Elevation of gage is 5,400 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 105 ft³/s, May 28, 1983, maximum gage height, 3.81 ft, May 17, 1984; minimum, 0.17 ft³/s, Nov 20, 1992, possible ice jam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 28	2200	*8.4	*1.05				

Minimum daily discharge, 0.73 ft³/s, Sep 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.7	1.7	e1.3	e1.5	1.8	4.5	7.7	3.1	1.6	.99	.82
2	1.2	1.7	1.8	e1.2	1.6	1.9	6.0	7.5	3.0	1.6	.98	.81
3	1.2	1.6	1.6	e1.1	1.7	1.9	6.7	7.1	3.0	1.5	.98	.79
4	1.3	1.7	1.6	1.1	1.7	1.9	6.3	6.8	2.9	1.5	1.0	.78
5	1.3	1.7	1.6	e1.2	1.7	1.9	6.2	6.7	2.9	1.5	.95	.89
6	1.3	1.7	1.6	e1.2	1.7	2.1	6.5	6.4	2.9	1.5	.93	.94
7	1.3	1.7	1.6	e1.3	1.7	2.3	6.7	6.2	2.8	1.5	.90	.93
8	1.3	1.8	1.6	e1.2	1.5	2.4	6.5	5.8	2.7	1.5	.85	.91
9	1.3	1.7	1.6	e1.2	1.8	2.6	6.4	5.7	2.5	1.6	.83	.92
10	1.4	e1.6	1.7	e1.2	1.7	3.0	6.4	5.6	2.5	1.5	.83	.88
11	1.6	e1.6	1.7	e1.3	1.7	2.9	6.4	5.4	2.4	1.6	.83	.83
12	1.4	e1.6	1.6	e1.3	1.7	2.7	6.3	5.2	2.7	1.6	.82	.81
13	1.4	e1.6	1.7	e1.3	1.7	2.6	6.2	5.1	2.8	1.4	.84	.82
14	1.5	e1.6	1.6	e1.3	1.6	2.6	6.4	5.0	2.7	1.4	.83	.83
15	1.5	e1.6	e1.6	e1.3	1.8	2.6	6.9	4.9	2.5	e1.4	.82	.84
16	1.5	e1.6	e1.5	e1.3	1.9	2.7	7.1	5.0	2.4	e1.3	.80	.85
17	1.5	e1.6	e1.5	1.3	1.7	2.6	7.4	4.7	2.3	1.3	.79	.87
18	1.5	e1.6	e1.5	1.5	1.7	2.7	7.7	4.5	2.3	1.3	.78	.86
19	1.5	1.7	e1.5	1.6	1.9	2.8	8.1	4.2	2.2	1.2	.76	.85
20	1.5	1.7	e1.5	1.6	1.8	3.1	8.2	4.1	2.1	1.2	.77	.84
21	1.6	1.7	e1.5	1.6	1.8	3.5	7.9	4.0	2.1	1.2	1.3	e.81
22	1.5	1.7	1.6	1.6	1.9	4.0	7.7	3.9	2.0	1.2	1.1	.79
23	1.5	1.6	1.6	1.6	1.9	4.1	7.4	3.8	2.0	1.2	.90	.77
24	1.5	1.6	e1.5	1.6	1.9	4.2	7.3	3.6	2.0	1.1	.89	.77
25	1.6	1.7	e1.4	1.6	1.8	4.4	7.4	3.5	1.9	1.1	.87	.75
26	1.5	1.6	e1.3	1.6	1.8	4.6	7.7	3.4	1.9	1.1	.85	.75
27	1.6	1.6	e1.3	1.6	1.8	4.4	7.9	3.4	1.9	1.1	.84	.74
28	1.6	1.6	e1.3	1.6	1.9	4.6	8.3	3.3	1.8	1.0	.84	.73
29	1.6	1.7	e1.4	e1.6	---	4.7	8.3	3.2	1.8	1.0	.82	.74
30	1.9	1.7	e1.4	e1.5	---	4.6	8.0	3.2	1.7	.99	.83	.75
31	1.8	---	e1.4	e1.4	---	4.6	---	3.1	---	e.99	.84	---
TOTAL	45.4	49.6	47.8	43.1	48.9	96.8	210.8	152.0	71.8	40.98	27.36	24.67
MEAN	1.46	1.65	1.54	1.39	1.75	3.12	7.03	4.90	2.39	1.32	.88	.82
MAX	1.9	1.8	1.8	1.6	1.9	4.7	8.3	7.7	3.1	1.6	1.3	.94
MIN	1.2	1.6	1.3	1.1	1.5	1.8	4.5	3.1	1.7	.99	.76	.73
AC-FT	90	98	95	85	97	192	418	301	142	81	54	49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

	2.00	2.06	1.95	1.97	2.41	4.60	9.28	13.1	6.86	3.42	2.21	1.87
MEAN	3.86	3.53	3.37	3.46	7.00	12.8	22.2	50.5	29.7	9.22	5.77	4.10
(WY)	1984	1984	1984	1971	1986	1983	1986	1983	1983	1983	1983	1983
MAX	.68	.93	.91	.83	1.00	1.06	1.79	1.55	.95	.60	.44	.47
(WY)	1991	1991	1964	1964	1964	1964	1990	1990	1990	1990	1990	1990

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SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1964 - 2001
ANNUAL TOTAL	780.25	859.21	
ANNUAL MEAN	2.13	2.35	
HIGHEST ANNUAL MEAN			4.31
LOWEST ANNUAL MEAN			12.5
HIGHEST DAILY MEAN	5.7 Apr 14	8.3 Apr 28	1.12 1983
LOWEST DAILY MEAN	.68 Aug 28	.73 Sep 28	.38 Aug 9 1990
ANNUAL SEVEN-DAY MINIMUM	.78 Aug 23	.75 Sep 24	.39 Sep 10 1990
ANNUAL RUNOFF (AC-FT)	1550	1700	3130
10 PERCENT EXCEEDS	3.7	5.9	9.9
50 PERCENT EXCEEDS	1.7	1.6	2.5
90 PERCENT EXCEEDS	.98	.84	1.1

e Estimated

